A Marine Protected Areas Strategy for the Pacific Coast of Canada

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Introduction

In 1994, the governments of Canada and British Columbia established an inter-governmental Marine Protected Areas (MPA) Working Group and a senior management Steering Committee to develop an integrated marine protected areas strategy for the Pacific coast of Canada. The agencies involved in this initiative include: the Department of Fisheries and Oceans (DFO), Parks Canada, B.C. Parks, the B.C. Land Use Coordination Office, Environment Canada (Canadian Wildlife Service) and the B.C. Ministry of Fisheries. Since fruition, these groups have been committed to working together in a coordinated effort to develop a Marine Protected Areas Strategy in full consultation with stakeholders involved in the marine environment.

The consultation process began in 1995 with the first Marine Protected Areas Forum in Cowichan Bay on Vancouver Island. This multi-stakeholder meeting brought together a wide range of people, including all three levels of government, First Nations, commercial and recreational fishers, environmental groups, scientists, and academics. During this forum, issues relating to the development of an MPA Strategy for the Pacific coast of Canada, the establishment of a network of protected areas in the marine environment, and the potential for stakeholder involvement throughout these processes were identified and discussed. In addition, government commitments were made to continue working on policy components of the MPA Strategy and to convene a second forum to discuss these policy issues.

In March 1997, the MPA Steering Committee and Working Group convened the second in a series of multi-stakeholder Marine Protected Areas Forums. In this case, two forums took place on the south and north coasts of B.C. (in Parksville and Prince Rupert, respectively) and involved greater participation from the various stakeholder groups. The purpose of these forums was to discuss the MPA Steering Committee and Working Group's draft discussion paper, "Toward a Marine Protected Areas Strategy for the Pacific Coast of Canada." This paper proposed the major policy components of an MPA Strategy for the Pacific coast, including: a common vision for and definition of MPAs; common goals and objectives for the MPA system; guiding principles for the establishment and management of MPAs; possible management regimes and designations for MPAs; and a proposed process for the identification, evaluation, establishment and management of MPAs.

The MPA Strategy is being developed to ensure that the MPA initiatives of several agencies in both Canada and B.C. are undertaken through one integrated process. The recent enactment of the Oceans Act, which shifts the Department of Fisheries and Ocean's (DFO) focus from species to ecosystem management, provides for the establishment and management of Marine Protected Areas by that agency. In addition, Parks Canada is currently pursuing new legislation to establish and manage a system of Marine Conservation Areas. Environment Canada has also expanded its role in the marine environment with amendments to the Canada Wildlife Act in 1994, enabling the Canadian Wildlife Service to establish Marine Wildlife Areas. B.C. Parks continues to expand its system of marine and coastal provincial parks and ecological reserves. The still evolving MPA Strategy is the first attempt in Canada to integrate both federal and provincial MPA programs into a single common initiative that has as its central goal the completion of a comprehensive system of MPAs along the Pacific coast of Canada.

A Proposed Definition for Marine Protected Areas

MPAs on the Pacific coast will include legally defined areas in the intertidal, subtidal and deep ocean marine environments, and, depending on the particular designation, may include their overlying waters, the seabed and underlying subsoil, their associated flora and fauna, and historical and cultural features. These areas will be reserved by legislation to protect part or all of the enclosed environments. In some cases, for example, an MPA could protect only the seabed or only the water column, although such a scenario would be the exception rather than the rule. This definition of MPAs is intended to be as inclusive as possible, to enable the establishment of a flexible and all-encompassing system of MPAs on the Pacific coast.

By using a variety of federal and provincial designations, MPAs along the Pacific coast will utilize a range of management regimes. MPAs will range from: highly protected areas that sustain species and habitats, to areas established primarily for recreational use or cultural heritage protection, to less restrictive areas in which the conservation of species, habitats, and their associated ecosystems is coupled with recreational opportunities and other explicitly defined activities such as commercial and sport fishing.

Benefits of Marine Protected Areas

It is anticipated that the establishment of a comprehensive system of MPAs will produce a variety of benefits to society at large, including the following:

Protect Biodiversity and Ecosystem Structure, Function and Integrity

Marine protected areas can contribute to the maintenance of biodiversity at all trophic levels of the ecosystem, and protect food web relationships and ecosystem processes. Marine protected areas enable the maintenance of species presence, age and size distribution, and abundance. They prevent vulnerability and the eventual loss of species, and they preserve the natural composition of the community.

Contribute to the Conservation of Fishery Resources

Marine protected areas can protect spawning stocks, spawning stock biomass and viable spawning conditions; raise population fecundity by enhancing reproductive capacity; enhance recruitment and spill-over of adults and juveniles into surrounding waters; and serve as harvest refugia.

Provide Opportunities for Education and Research

Marine protected areas can: foster an increased understanding and awareness of marine ecosystems and marine issues; serve as scientific benchmarks; provide sites for long-term monitoring of relatively undisturbed sites and intact ecosystems; and play a valuable role in public education efforts related to the importance of marine conservation and the impacts of human activities on marine biodiversity.

Provide Recreation and Tourism Opportunities

MPAs can provide opportunities for outdoor recreation and tourism, as well as the pursuit of activities of a spiritual or aesthetic nature. The protection of special recreation features, such as boat havens and safe anchorages, beaches and marine travel routes, help secure the wealth and diversity of recreational opportunities available along the coast.

Provide Socio-Economic Benefits for Coastal Communities

MPAs can assist in and contribute to diversifying and stabilizing the economic base of coastal communities by such means as enhancing the sustainability of commercial and sport fisheries, and by providing opportunities for recreation and tourism operations and the development of local and regional support services.

A Proposed Vision for a System of Marine Protected Areas

Marine protected areas are a major component of Canada's and British Columbia's commitment to protecting and restoring the quality and integrity of the marine environment, and to securing a sound and prosperous economy for present and future generations.

Canada and British Columbia will complete a comprehensive system of marine protected areas on the Pacific coast to protect and conserve a diversity of biological, natural, and cultural heritage resources. These area will be representative of the full range of marine ecosystems of the Pacific coast, and will provide a variety of outdoor recreation and tourism opportunities.

This expanded network of marine protected areas will be established and managed through the cooperative and collaborative efforts of all levels of government, First Nations, and marine stakeholders.

Goal and Objectives of the MPA Strategy

The overall goal of the MPA Strategy is:

Canada and British Columbia will cooperatively establish a comprehensive and integrated network of marine protected areas along the Pacific coast of Canada.

This goal will be achieved by meeting the following objectives:

To Protect Marine Biodiversity, Representative Ecosystems and Special Natural Features

Objectives:

- To protect representative examples of the marine ecosystems and habitats of the Pacific coast in order to conserve the diversity of the full range of marine species, habitats, and ecosystems; and
- To protect rare, unique, or special natural coastal and marine features.

To Protect and Conserve Fishery Resources and their Habitats

Objective:

- To assist in the maintenance of viable populations of all marine species and the sustainability of fisheries by:
 - providing harvest refugia;
 - providing a conservative tool for fisheries management;
 - protecting habitats; and
 - protecting spawning stocks.

To Protect and Present Cultural Heritage

Objectives:

- To protect and conserve sites and features of the Pacific coast's marine cultural heritage; and
- To increase the level of public awareness of human use and occupation of the marine and coastal environment.

To Provide Recreation and Tourism Opportunities

Objectives:

 To protect natural marine and coastal environments to enhance opportunities for recreation and tourism: and To protect special recreational features such as boat havens and safe anchorages, beaches and marine travel routes.

To Provide Opportunities for Scientific Research

• Objective: To facilitate research to increase the level of scientific knowledge about marine ecology, ecosystems and the effects of marine protected areas on marine resources.

To Provide Opportunities for Education and Increasing Marine Environmental Awareness

 Objective: To foster greater public understanding of marine ecology and conservation through education programs and stewardship initiatives.

A Variety of Objectives: A Range of Uses

The objective(s) for which an MPA is established will influence both its legal designation and the selection of appropriate uses for the area. A coast-wide system of MPAs that would collectively fulfill the above objectives would utilize the full spectrum of management regimes, defining levels of resource protection that could vary both within and among MPAs. As discussed above, these levels of protection range from strict preservation on a site-specific level at one end of the spectrum to a level aimed at multiple-use, with a broad mandate for resource conservation on an ecosystem level, at the other.

For example, areas possessing an outstanding marine feature, a critical spawning habitat for a particular species, or perhaps a historic shipwreck, may require high levels of protection. All consumptive activity, and in particularly sensitive cases, most recreational activity, may be prohibited. Such areas would most likely be established as ecological reserves under the province's Ecological Reserve Act or as Marine Protected Areas under the Oceans Act. They could also be created as preservation zones within larger, more multiple-use, MPAs such as marine conservation areas and provincial parks.

Other MPAs could be created expressly for recreation or tourism purposes, such as provincial parks under the Park Act, and certain zones within national or provincial parks or marine conservation areas. These could provide for a wider range of uses, including boating and sport fishing. Other marine protected areas will place management emphasis on the conservation of wildlife. These types of MPAs may have a less restrictive management regime that focuses restrictions on only those human activities that would compromise protection of the targeted species, features or values within the protected area. Activities and uses that do not compromise their integrity could be permitted.

The size of MPAs can also influence the range of protection levels. Relatively large MPAs may be established to protect representative marine ecosystems or large marine features such as offshore banks, the marine habitats surrounding island archipelagos or the extensive foraging areas utilized by sea birds near their colonies. Such MPAs may be able to accommodate a wide range of permitted uses and sustain a more conservative level of protection. These relatively large MPAs can integrate the objectives of conserving marine biodiversity and fisheries resources with the need for continued access to recreation opportunities, tourism and/or sustainable resource harvesting.

Minimum Protection Standards

While the levels of protection can vary along the management spectrum, there must always be a recognized minimum level of protection that applies to all MPA designations. Canada and B.C. have agreed to the following Minimum Protection Standards that would apply to all MPAs established on the Pacific coast: no ocean dumping; no dredging; and no exploration for or development of non-renewable resources. Note that these minimum standards do not apply directly to the harvest of living resources. The levels of protection that would be applied to the living resources within a particular MPA would be determined on a case-by-case basis, through the preparation of a management plan, with the involvement of First Nations, marine stakeholders and the public.

Planning a Network of Marine Protected Areas for the Pacific Coast of Canada

To effectively plan for a network of MPAs on the Pacific coast of Canada, an integrated and collaborative approach is required to ensure that the full range of resources and values present in coastal and marine areas are considered in relation to community, economic and environmental needs. To provide a context for all resource use planning, including MPAs, Canada and B.C. are developing an Integrated Coastal Zone Management (ICZM) planning approach for the coastal areas of British Columbia. This approach enables governments, stakeholders, advocacy groups, communities and individuals to collaborate in making comprehensive coastal and marine resource management decisions. ICZM plans consider the full range of resources and values present in coastal and marine areas and provide direction for their future use, as well as a mechanism for evaluating the success of management activities over time. Results are future-oriented and include monitoring and plan adjustment in response to changing societal values and circumstances.

A Regional Approach to Integrated Marine Planning

The planning and management requirements of the various coastal regions of B.C. vary significantly. The north coast, for example, is still relatively wild and pristine, with limited coastal development. In contrast, the Strait of Georgia supports the majority of British Columbia's population and faces numerous pressures from pollution, coastal development, habitat loss, increased fishing pressure, and the introduction of exotic species. For these and other regions of the coast to be planned effectively, a series of regionally based planning processes will be required. In addition, different levels of planning may be required to accommodate the needs of First Nations, stakeholders, and the general public in different regions along the coast.

Six regions are currently being considered for formulating a regional approach to planning on the Pacific Coast:

- the north coast
- the Queen Charlotte Islands
- the central coast
- the west coast of Vancouver Island
- the Strait of Georgia
- the offshore region

Canada and B.C. estimate that all regional planning processes and a comprehensive network of MPAs on the coast could be completed by the year 2010.

Planning the System of MPAs

The governments of Canada and B.C. have agreed to institute a common generic approach to planning for MPAs, within the broader context of ICZM planning, that could be applied throughout the various regions of the coast. There would, of course, be enough flexibility built into this approach to allow for regional differences. In simple terms, this generic planning process consists of the following three phases:

- Area Identification,
- Information Gathering and Evaluation, and
- Planning and Decision Making.

The Identification Phase

The first step in establishing a system of MPAs is to identify potential MPAs that reflect the range of key marine values, attributes and features of Canada's Pacific coast. In each different planning region,

community groups, First Nations, governments, stakeholders, academic institutions, individuals, and the general public will have opportunities to identify MPA candidates. The primary mechanism for MPA identification would be the various regional planning processes.

Canada and B.C. are also considering the creation of an inter-governmental Marine Protected Areas Secretariat, which could provide a "one-stop-shopping" approach for all MPA proposals for the Pacific coast. Such a body would be particularly useful for those who are not directly involved in a regional planning process but would like to identify MPA candidates in a particular region. The Secretariat's responsibilities would include: receiving and reviewing proposals, channeling proposals and any additional information to the appropriate regional planning process, and maintaining a central data base of MPA proposals. In the absence of an available planning process, the Secretariat could also investigate management options such as the application of interim management guidelines, conducting a special study or holding the proposal in abeyance until a regional planning process is available.

The Information-Gathering Phase

The purpose of the information-gathering phase is to collect data and information on proposed MPAs according to ecological, recreational and cultural heritage. Ranking or selecting MPA proposals does not occur in this phase.

This information will be collected and analysed by a technical review committee operating under the auspices of the regional planning processes. The technical review committee would consist of government representatives with a wide range of technical and scientific expertise. This committee would ensure that all available information is collected and compiled for each MPA proposal. In many cases, the technical committee would solicit input from non-government representatives. All collected information is forwarded to the participants in the regional planning processes to aid in the decision-making process.

The Planning and Decision-Making Phase

The purpose of the planning phase is to bring all marine users and interests together, including First Nations, stakeholders, and the public, to review, verify and discuss all information pertaining to an MPA proposal. This includes all ecological, recreational and cultural heritage data collected in the information-gathering phase, along with traditional and local knowledge. A feasibility and socioeconomic assessment, if considered necessary, could be undertaken in the planning phase. Results from this assessment would be made available to planning tables for their consideration.

Once planning tables have collaboratively agreed on the terms for establishing a candidate MPA, recommendations would be forwarded to the appropriate federal and/or provincial legislative authorities for their consideration and approval. These recommendations could include matters relating to the suite of broad permissible uses appropriate for a given MPA and the most appropriate legislation and regulations to govern its establishment to ensure that the area can be legally managed to achieve the intended management objectives.

In the event that an MPA proposal is located within a region not undergoing regional planning, several options may be available for making interim or longer term decisions:

- The application of Interim Management Guidelines;
- Conducting a special study; or
- Holding the MPA proposal in abeyance until a planning process is available.

Interim management guidelines. Interim management guidelines may be applied where appropriate and necessary to protect the values of the candidate MPA. There would not be a blanket moratorium on resource development opportunities or activities in these areas as marine planning processes proceed.

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Instead, interim management guidelines may be applied on a case-by-case basis which, where required, may restrict certain activities that might compromise the values of a MPA candidate.

Special study. In unique cases, candidate MPAs that will not be undergoing regional planning may be considered through the application of a special study. A comprehensive public consultation process would be associated with this study to ensure that all stakeholders are involved. This approach would be very limited in use and applied only in certain situations. Areas that contain unique ecological processes, critical habitat, or areas for endangered or threatened species may be examples of candidate MPAs that may, if necessary, be considered through this approach.

Holding proposals in abeyance. Candidate MPAs proposals that are not eligible for the application of interim management guidelines or a special study will be held in abeyance, in most cases, until a regional planning process is put in place.

Next Steps in the Development of an MPA Strategy for the Pacific Coast

Throughout the development of the MPA Strategy for the Pacific coast, the governments of Canada and B.C. have been, and continue to be, committed to continued consultation with First Nations groups, stakeholders and other interested parties. Upon completion of this consultation, Canada and B.C. anticipate the draft Strategy to be released in early 1998, which will be distributed widely among marine stakeholders, First Nations and the general public for yet another round of consultation. Canada and B.C. hope to be able to finalize the MPA Strategy in 1998 to mark a significant contribution to the commemoration of the International Year of the Ocean.

Authors' Note

In August 1998, the governments of Canada and British Columbia released a discussion paper entitled "Marine Protected Areas: A Strategy for Canada's Pacific Coast." The document was to be available for public review and comment for a period of 90 days, during which government representatives were also to be available for meetings to discuss the document in more detail.